

IN THE CLAIMS:

Without prejudice, please replace/amend the claims as follows:

22. (Amended) An electrochemical sensor for determining at least one of a gas component and a gas concentration in a gas mixture, comprising:

an ion-conducting solid electrolyte body;

at least one electrode situated on the ion-conducting solid electrolyte body; and

an electrode lead leading to the at least one electrode, wherein the electrode lead includes a material that possesses one of no ionic conductivity and an ionic conductivity that is significantly less than that of a material of the at least one electrode so that an internal resistance of the ion-conducting solid electrolyte body in a lead region of the sensor is significantly greater than an internal resistance of the solid electrolyte body in a measuring region of the sensor.

B2

27. (Amended) The electrochemical sensor according to claim 25, wherein the at least one electrode includes a pore-forming material to increase a porosity of the at least one electrode.

32. (Amended) The electrochemical sensor according to claim 22, wherein the at least one electrode includes at least one of an internal pump electrode and a reference electrode, the internal pump electrode and the reference electrode being configured with corresponding electrode leads of a measuring cell.

B3

33. (Amended) An electrochemical sensor for determining at least one of a gas component and a gas concentration in a gas mixture, comprising:

an ion-conducting solid electrolyte body;

at least one electrode situated on the ion-conducting solid electrolyte body; and

an electrode lead leading to the at least one electrode, wherein the electrode lead includes a material having a low resistance in comparison with a material of the at least one electrode so that a resistance of the electrode lead is less than a resistance of the electrode.

B4

38. (Amended) The electrochemical sensor according to claim 36, wherein the at least one electrode includes a pore-forming material to increase a porosity of the at least one electrode.

43. (Amended) The electrochemical sensor according to claim 33, wherein the at least one electrode includes at least one of an internal pump electrode and a reference electrode, the internal pump electrode and reference electrode being configured with corresponding electrode leads of a measuring cell.

44. (Amended) An electrochemical sensor for determining at least one of a gas component and a gas concentration in a gas mixture, comprising:

B6 an ion-conducting solid electrolyte body;

at least one electrode situated on the ion-conducting solid electrolyte body; and

an electrode lead leading to the at least one electrode, wherein:

the electrode lead includes a material having a low resistance in comparison with a material of the at least one electrode so that a resistance of the electrode lead is less than a resistance of the electrode, and

the material possesses one of no ionic conductivity and an ionic conductivity that is significantly less in comparison with the material of the at least one electrode so that an internal resistance of the ion-conducting solid electrolyte body in a lead region of the sensor is significantly greater than an internal resistance of the solid electrolyte body in a measuring region of the sensor.

Please add without prejudice new claims 45 and 46 as follows:

B7 --45. (New) The electrochemical sensor according to claim 22, wherein a "lambda=1-ripple" is at least decreased.

46. (New) The electrochemical sensor according to claim 22, wherein the internal resistance of the ion-conducting solid electrolyte body does not impact a temperature regulation of the electrochemical sensor.--.

REMARKS

Claims 45 and 46 have been added, and therefore claims 22 to 46 are now pending.

Applicant respectfully requests reconsideration of the present application in view of this response.